

[4910-13-P]

### **DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2012-0934; Directorate Identifier 2011-NM-260-AD]

RIN 2120-AA64

**Airworthiness Directives;** Airbus Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A330-200 and -300 series airplanes. This proposed AD was prompted by a report of a prematurely fractured main landing gear (MLG) bogie beam. This proposed AD would require replacing certain MLG bogie beams before reaching new reduced life limits. We are proposing this AD to prevent fracture of the MLG bogie beam, which, under high speed, could ultimately result in the airplane departing the runway, the bogie beam detaching from the airplane, or collapse of the MLG; and consequent structural damage to the airplane and injury to the occupants.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the instructions for submitting comments.
  - Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
   Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
   20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Messier-Dowty: Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; telephone 703-450-8233; fax 703-404-1621; Internet <a href="https://techpubs.services/messier-dowty.com">https://techpubs.services/messier-dowty.com</a>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149.

#### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2012-0934; Directorate Identifier 2011-NM-260-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness

Directive 2011-0212, dated October 31, 2011 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During ground load test cycles on an A340-600 aeroplane, the MLG bogie beam has prematurely fractured.

The results of the investigation identified that this premature fracture was due to high tensile standing stress, resulting from dry fit axle assembly method. Improvement has been introduced subsequently with a grease fit axle assembly method.

Fatigue and damage tolerance analyses were performed, whose results demonstrated that the current life limit of certain MLG bogie beams with dry fit axles installed on A330 aeroplanes only must be reduced compared to the life limit stated in the A330 Airworthiness Limitations Section (ALS) Part 1-Safe Life Airworthiness Limitation Items revision 05 approved by EASA on 29 July 2010.

Failure to comply with the reduced life limit of the MLG bogie beam with dry fit axle might jeopardize the MLG structural integrity.

For the reasons described above, this [EASA] AD requires the replacement of the affected MLG bogie beams before reaching the new reduced life limit.

The unsafe condition is a possible fracture of the MLG bogie beam, which, under high speed, could ultimately result in the airplane departing the runway, the bogie beam detaching from the airplane, or collapse of the MLG; and consequent structural damage to the airplane and injury to the occupants. You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

Messier-Dowty has issued Service Letter A33-34 A20, Revision 5, including Appendices A through F, dated July 31, 2009. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

### FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Costs of Compliance**

Based on the service information, we estimate that this proposed AD would affect about 53 products of U.S. registry. We also estimate that it would take about 16 work-hours per MLG bogie beam (2 MLG bogie beams per airplane) to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$255,000 per MLG bogie beam. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be up to \$27,174,160, or \$256,360 per MLG bogie beam.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

"Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
  - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

Airbus: Docket No. FAA-2012-0934; Directorate Identifier 2011-NM-260-AD.

### (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

None.

### (c) Applicability

This AD applies to all Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; certificated in any category; all manufacturer serial numbers (S/Ns).

## (d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

### (e) Reason

This AD was prompted by a report of a prematurely fractured main landing gear (MLG) bogie beam. We are issuing this AD to prevent fracture of the MLG bogie beam, which, under high speed, could ultimately result in the airplane departing the runway, the bogie beam detaching from the airplane, or collapse of the MLG; and consequent structural damage to the airplane and injury to the occupants.

## (f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

### (g) Bogie Beam Replacement

At the later of the times specified in paragraph (g)(1) or (g)(2) of this AD, replace all MLG bogie beams having part number (P/N) 201485300, 201485301, 201272302, 201272304, 201272306, or 201272307, except those that have S/Ns S2A, S2B, or S2C, as identified in Messier-Dowty Service Letter A33-34 A20, Revision 5, including Appendices A through F, dated July 31, 2009, with a new or serviceable part, in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or European Aviation Safety Agency (EASA) (or its delegated agent).

(1) Before the accumulation of the flight hours or landings, whichever occurs first, specified in table 1 of this AD, as applicable to airplane type, model, and weight variant (WV).

Table 1 to Paragraph (g)(1) of this AD – MLG Bogie Beam Life Limit

Affected Airplanes –	Life limit from first installation of MLG bogie beam on an airplane –
Model A330-201, -202, -203, -223, -243, weight variant	50,000 landings or 72,300
(WV)02x, WV05x (except WV058), and WV06x series	total flight hours
Model A330-201, -202, -203, -223, -243 WV058	50,000 landings or 57,900 total flight hours
Model A330-301, -302, -303, -321, -322, -323, -341, -342,	46,000 landings or 75,000
-343 WV00x, WV01x, WV02x, WV05x series	total flight hours

(2) Within 6 months after the effective date of this AD.

### (h) Parts Installation Limitations

As of the effective date of this AD, a MLG bogie beam having any part number identified in paragraph (g) of this AD, may be installed on an airplane, provided its life has not exceeded the life limit defined in table 1 to paragraph (g)(1) of this AD, and is replaced with a new or serviceable part before reaching the life limit defined in table 1 to paragraph (g)(1) of this AD.

# (i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested

using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Information may be e-mailed to:

9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

### (j) Related Information

- (1) Refer to MCAI EASA Airworthiness Directive 2011-0212, dated October 31,
   2011; and Messier-Dowty Service Letter A33-34 A20, Revision 5, including Appendices
   A through F, dated July 31, 2009; for related information.
- (2) For service information identified in this AD, contact Messier-Dowty: Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; telephone 703-450-8233; fax 703-404-1621; Internet

https://techpubs.services/messier-dowty.com. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on August 24, 2012.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-22425 Filed 09/11/2012 at 8:45 am; Publication Date: 09/12/2012]

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